NEW RECORDS OF PHORIDAE (DIPTERA) REARED FROM FUNGI

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ONE OF US (REE) has reared further scuttle flies from the sporophores of named fungi. These have been identified by RHLD. Several of our new records represent novel host records for the flies and some are the first records of named Phoridae from the fungus species in question. While the previous records are largely covered by two recent reviews of fungus breeding Phoridae (Disney, 1994, Yakovlev, 1994), both of these preceded the latest edition of the invaluable Dictionary of Fungi (Hawksworth *et al*, 1995) and the identification guide by Courtecuisse & Duhem (1995). Both these works alter the classification and names of several common fungi. Our new records are presented below.

Megaselia berndseni (Schmitz)

5 ♂♂ and 13 ♀♀ were reared from *Agrocybe molesta* (Lasch) Singer (= *dura* (Bolt. ex Fr.) Sing) (Bolbitaceae) collected 31 July 1994 at Cockthorpe Common, Norfolk (grid ref. 53/9842). This is the first record of a named phorid reared from this fungus species.

Megaselia flava (Fallén)

3 ♂♂ and 1 ♀ were reared from *Peziza varia* (Hedw.) Fr. (Pezizaceae) collected 26 November 1995 at Holt Country Park, Norfolk (grid ref. 63/0832). This confirms the only previous record of a named phorid reared from this fungus.

Megaselia flavicans Schmitz

3 ♂♂ and 6 ♀♀ were reared from *Russula delica* Fr. (Russulaceae) collected 23 September 1994 at Lyng Bridge, Norfolk (grid ref. 63/0717). 1 ♂ and 1 ♀ were reared from *R. ochroleuca* (Pers. ex Secr.) Fr. collected 23 August 1992 at Bridgham picnic site, Norfolk (grid ref. 52/9683). The former confirms the only previous record of a named phorid reared from this fungus, and the latter represents a new host record. Three other phorid species have previously been reared from *R. ochroleuca*.

Megaselia frameata Schmitz

4 ♂♂ and 4 ♀♀ were reared from *Laetiporus sulphureus* (Bull. ex Fr.) Murr. (Polyporaceae) collected 10 August 1994 at Felthorpe Woods, Norfolk (grid ref. 63/1417). The only previous record of a named phorid reared from this fungus is for the Nearctic *M. longipennis* (Malloch) (Ackerman & Shenefeldt, 1973).

Megaselia hirtiventris (Wood)

2 ♂♂ and 8 ♀♀ were reared from *Agaricus campestris* L. ex Fr. (Agaricaceae) collected 29 August 1994 at Lyng Bridge, Norfolk (grid ref. 63/0717). This confirms previous records. 1 ♂ and 3 ♀♀ were reared from *Psathyrella candolleana* (Fr.) Maire (Coprinaceae) collected 6 July 1994 at Ashwellthorpe Woods, Norfolk (grid ref. 62/1397). This is a new host record for this fly species.

Megaselia latior Schmitz

1 ♂ and 2 ♀♀ were reared from *Psathyrella candolleana* (Fr.) Maire (Coprinaceae) collected 19 August 1994 at Bradfield Woods, Suffolk (grid ref. 52/9358). This is a new host record for this fly species.

Megaselia lutea (Meigen)

18 ♂♂ and 2 ♀♀ were reared from *Helvella sulcata* Afz: Fr. (Helvellaceae) collected 28 July 1997 at Buxton Heath, Norfolk (grid. ref 63/1721). This is the first record of a named phorid reared from this fungus species. 30 ♂♂ and 54 ♀♀ were reared from *Russula cyanoxantha* (Schaeff. ex Secr.) Fr. (Russulaceae) collected March 1994 at Honingham Fen, Norfolk (grid ref. 63/0911), thus confirming previous records from this host. 12 ♂♂ and 2 ♀♀ were reared from *R. heterophylla* (Fr.) Fr. collected 13 September 1994 at Oulton, Norfolk (grid ref. 63/1429). This confirms this host, previously recorded from mainland Europe. 22 ♂♂ and 16 ♀♀ were reared from *R. ochroleuca* (Pers. ex Secr.) Fr. collected 15 May 1994 at Hockering Wood, Norfolk (grid ref. 63/0715). 2 ♂♂ and 1 ♀ were reared from *R. pectinatoides* Peck collected 28 July 1997 at Buxton Heath, Norfolk (grid ref. 63/1721). The rearings from these last two species of *Russula* confirm previous records. 3 ♀ were reared from *Xerocomus rubellus* (Krombh.) Quél. (= *Boletus versicolor*) (Xerocomaceae) collected 18 November 1995 at Marriots Way, Norfolk (grid ref. 63/1417). This is a new host record for this species. Three other phorid species have been reared from this fungus.

Megaselia nigra (Meigen)

3 ♀♀ were reared from *Agaricus campestris* L. ex Fr. (Agaricaceae) collected 29 August 1994 at Welborne, Norfolk (grid ref. 63/0609), thus confirming many previous records. 2 ♂♂ and 21 ♀♀ were reared from *Agrocybe praecox* (Pers. ex Fr.) Fayoud (Bolbitaceae) collected 20 June 1997 at Welborne, Norfolk (grid ref. 63/0609). This is a new host record for this fly species. 2 ♀♀ were reared from *Macrolepiota* (= *Lepiota*) *rhacodes* (Vitt.) Quél. (Lepiotaceae) collected 26 December 1995 at East Tuddenham, Norfolk (grid ref. 63/0912), thus confirming previous records. 4 ♂♂ and 1 ♀ were reared from *Melanoleuca melaleuca* (Pers. Fr.) Murrill (= *M. vulgaris*) (Tricholomataceae) collected 29 September 1989 at Felthorpe Wood, Norfolk (grid ref. 63/1416). This is the first record of a named phorid reared from this fungus. 1 ♀ was reared from *Morchella esculenta* Pers. ex St. Amans (Morchellaceae) collected 9 April 1997 at Ashwellthorpe Woods, Norfolk (grid ref. 62/1397). This is a new host record for this fly. 52 ♂♂ and 67 ♀♀ were reared from *Psathyrella candolleana* (Fr.) Maire (Coprinaceae) collected June 1997 at Beeston Common, Norfolk (grd ref. 63/1642). This is a new host record for this fly.

Megaselia scutellaris (Wood)

2 ♂♂ and 3 ♀♀ were reared from *Russula pectinatoides* Peck (Russulaceae) collected 28 July 1997 at East Tuddenham, Norfolk (grid ref. 63/0912). This is a

new host record for this fly. 5 ♂♂ and 8 ♀♀ were reared from *Tricholoma terreum* (Schaeff. ex Fr.) Kummer (Tricholomataceae) collected 12 November 1989 at Burnham Overy, Norfolk (grid ref. 63/8844). This confirms previous records from mainland Europe.

The specimens from the *Russula* were somewhat smaller than average for this species and the microtrichia on the male hypandrium more extensive laterally and on the posterior process of the left side. In view of this RHLD reconsidered his previously proposed synonymy of *M. scutellariformis* (Schmitz) with this species (Disney, 1985). To this end a male cotype of *M. scutellaris* has been remounted on a slide and designated the lectotype. Its label reads "Herefordshire, Botany Bay, 16.9.05, J.H. Wood". Likewise a male syntype of *M. scutellariformis*, labelled "Valkenburg, 7.VI.24, H. Schmitz", has been remounted on a slide in order to see the fine details of its hypopygium. Although Schmitz (1926) stated that the hypopygium of this species was "ganz wei bei *scutellaris*", in fact the microtrichia differ from the lectotype of the latter species. Thus they cover the entire ventral face of the left process and much of the ascending left side of the hypandrium. In Wood's specimen, however, the microtrichia are largely restricted to the ventral face and the inner half of the left process. Sorting all available specimens into these segregates then allowed examination of the other features highlighted by Schmitz for any evidence of correlations. Thus he considered the costal index and costal cilia to be shorter in his species than in *M. scutellaris*. The wing details of the latter's male lectotype are as follows. Costal index 0.50, costal ratios 3.44 : 1.65 : 1, costal cilia 0.17-0.18 mm long, wing length 2.3 mm. For all the males examined the ranges are as follows. Costal index 0.40-0.51, costal ratios 2.86-4.47 : 1.36-2.24 : 1, costal cilia 0.11-0.18 mm, wing length 1.7-2.6 mm. However, there is no correlation between the distribution patterns of microtrichia on the hypandrium and a shorter costal index and costal cilia, or any other of these measures. The only evident partial correlations are between the wing length and the other wing features. These, however, can be largely attributed to allometric effects. The principal perception to emerge is that the species *M. scutellaris* is somewhat more variable in size than usual (as evidenced by the range of variation in the wing length) and consequently exhibits variation in many other small details. Furthermore the distribution of microtrichia on the hypandrium is somewhat more variable than usual and the latter's left process is somewhat variable in size. The conclusion is that there is no evidence justifying reinstatement of Schmitz's species.

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Argyresthia trifasciata Stdgr. (Lep.: Yponomeutidae) new to Norfolk

On 28 May 1999, amid an otherwise unremarkable catch, I took a single specimen of *Argyresthia trifasciata* in the moth trap run in my garden on the western outskirts of Norwich (grid reference TG 215090). This is a new record for Norfolk.

The species was first taken in Britain in 1982 at Hampstead by R. Softly but a long gap ensued before further records in 1997 at sites in North Hampshire and Stockport, Cheshire. In 1998 it occurred at the same Hampshire site, as well as at Raynes Park, Surrey (four specimens) and at a different site in Cheshire. Records this year, additional to my own, are South Kensington (Middlesex) and Aberdeen (M. Honey, *pers. comm.*).

There is no shortage of possible foodplants (*Juniperus, Cupressus*) in the vicinity, both in neighbouring gardens and in a nearby large cemetery.

I am grateful to Dave Hipperson for confirming the identification and to Martin Honey for providing me with details of previous records.– STUART PASTON, 25 Connaught Road, Norwich, NR2 3BP.

Further records of *Argyresthia trifasciata* Stdgr. (Lep.: Yponomeutidae) in Cheshire (VC58) during 1999

On 19 June 1997 Barry Shaw recorded the second British specimen of *Argyresthia trifasciata* at Heald Green, Greater Manchester (VC58, Cheshire) and reported his find in *Atropos* **6**:74. Further specimens from the south-east of England were exhibited by Mark Parsons at the 1998 BENHS exhibition in London and are thought to be third, fourth and fifth British records.